Rhodora

JOURNAL OF THE

NEW ENGLAND BOTANICAL CLUB.

Conducted and published for the Club, by
BENJAMIN LINCOLN ROBINSON Editor-in-chief.
FRANK SHIPLEY COLLINS
MERRITT LYNDON FERNALD } Associate Editors.
HOLLIS WEBSTER
WILLIAM PENN RICH
EDWARD LOTHROP RAND } Publication Committee.

Vol. 12. September, 1910. No. 141.

CONTENTS:

Woody Plants of Brooklin, Maine. *A. H. Graves* 173
Notes from the Phaenogamic Herbarium of the New England Botanical Club,—I. *M. L. Fernald* 185

Boston, Mass.
1052 Exchange Building.

Providence, R. I.
Preston and Rounds Co.

RHODORA.—A monthly journal of botany, devoted primarily to the flora of New England. Price $1.00 per year ($1.25 to all foreign countries including Canada); single copies 15 cents. Volume 1, $2.00, Vol. 2, $1.50. All remittances by check or draft, except on Boston or New York, must include ten cents additional for cost of collection. Notes and short scientific papers, relating directly or indirectly to the plants of the northeastern states, will be gladly received and published to the extent that the limited space of the journal permits. Forms will be closed five weeks in advance of publication. Authors (of more than one page of print) will receive 25 copies of the issue in which their contributions appear. Extracted reprints, if ordered in advance, will be furnished at cost.

Address manuscripts and proofs to
B. L. ROBINSON, 3 Clement Circle, Cambridge, Mass.

Subscriptions, advertisements, and business communications to
W. P. RICH, 300 Massachusetts Avenue, Boston, Mass.

Single copies may be had from
E. L. RAND, Corresponding Sec'y N. E. Botanical Club,
1052 Exchange Building, Boston, Mass.

Entered at Boston, Mass., Post office as Second Class Mail Matter

SYNOPTICAL FLORA OF NORTH AMERICA, by A. GRAY and others. Vol. I. Fascicles 1 and 2. A critical treatment of forty-five families of polypetalæ (*Ranunculaceæ to Polygalaceæ*) 1895-1897. $5.20.—GRAY HERBARIUM of Harvard University, Cambridge, Mass.

KEY TO NEW ENGLAND TREES, Wild and Commonly Cultivated, based primarily upon leaf characters, by J. FRANKLIN COLLINS and HOWARD W. PRESTON. Price 40c. net. PRESTON & ROUNDS Co., Providence, R. I.

EMENDATIONS OF THE SEVENTH EDITION OF GRAY'S MANUAL, I. Reprints of the article on "Emendations of the Seventh Edition of Gray's Manual, I," on paper of the size of Gray's Manual can be had on application to E. L. RAND, 1052 Exchange Building, Boston, Mass. Price 10 cents, postpaid.

CHECK LIST OF GRAY'S MANUAL, 7th EDITION, compiled by M. A. DAY. Leatherette. Pocket size. Invaluable for collectors' memoranda and herbarium records. Published and sold by the GRAY HERBARIUM, Cambridge, Mass. Price postpaid 20 cts. each. Ten copies $1.50.

Advertisements of Nurserymen and Dealers in Botanical and other Scientific Publications are inserted in these pages at the following rates per space of 4 in. by 3–4 in. *1 year $4.00, 6 months $2.50.*

Rhodora

JOURNAL OF

THE NEW ENGLAND BOTANICAL CLUB

Vol. 12. September, 1910. No. 141.

WOODY PLANTS OF BROOKLIN, MAINE.

ARTHUR H. GRAVES.

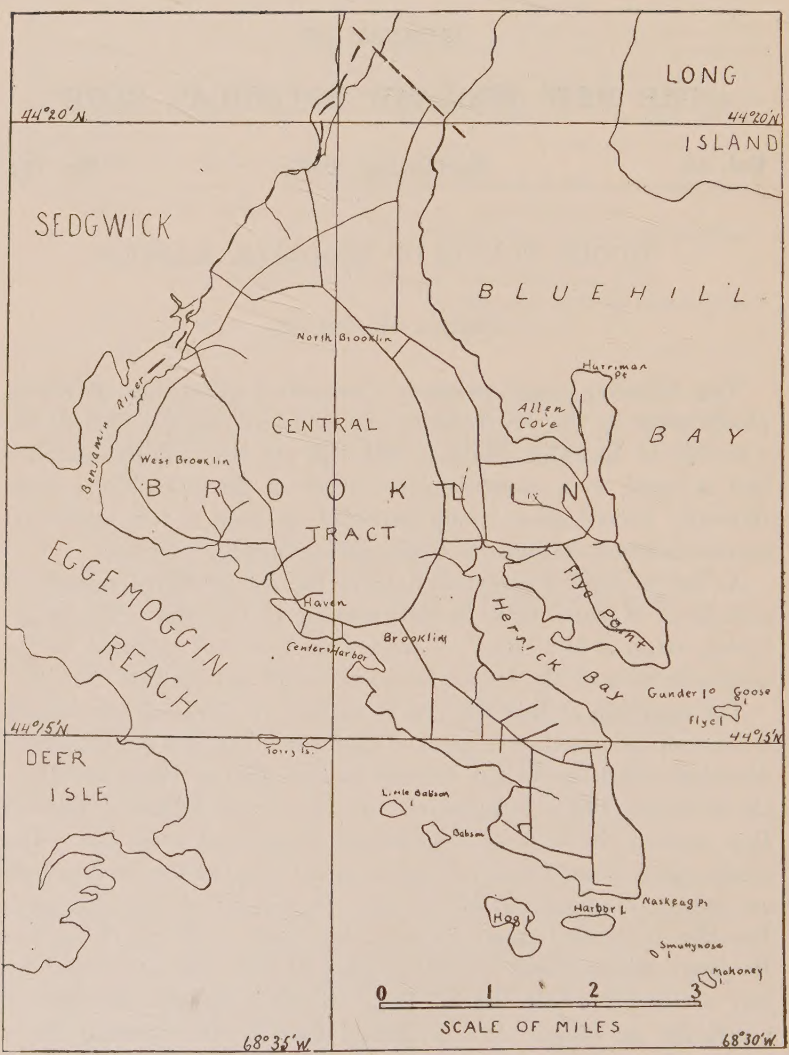
THE following paper presents a record of collections of woody plants made by the writer during the month of August, 1908, in the township of Brooklin, Maine. Although the list is fairly complete and is based on a comprehensive survey of the township, a more thorough investigation would probably disclose a few additional species and new stations for those species already observed.

As far as can be ascertained there are no published records of collections of plants made in the township of Brooklin. The neighboring island of Mt. Desert, however, has been well explored, as the admirable flora of Mt. Desert Island by Rand and Redfield[1] testifies.

The township of Brooklin covers an area of about sixteen square miles, and is located on a point of land extending in a southeasterly direction, which marks the extreme eastern limit of Penobscot Bay. On its eastern side it is separated from Mt. Desert Island by Bluehill Bay, and to the west lie Eggemoggin Reach and Deer Isle. The whole region is fairly low, the highest point being at the north, where an altitude of about 200 feet occurs. Northwest of this high point Brooklin is divided from the adjoining town of Sedgwick by the Benjamin River, which is said at times of high tide to connect by way of Salt Pond with Bluehill Bay. If this is the case, the town is practically an island. In the central part of the township lies a plateau of considerable extent, which is entirely uninhabited and

---

[1] Rand, E. L., and Redfield, J. H.; Flora of Mount Desert Island, Maine. A preliminary catalogue of the plants growing on Mount Desert and the adjacent islands. Cambridge. 1894.



MAP OF THE TOWNSHIP OF BROOKLIN, MAINE

contains a number of interesting bogs interspersed with stretches of coniferous forests. This region I have designated the "Central Tract."

To the west and north of this tract are situated the settlements of West Brooklin and North Brooklin, while immediately south lies the most thickly settled part of the town, known as Brooklin Center. Further to the south the land is divided by Herrick Bay into two peninsulas, called Naskeag Point on the west, and Flye Point on the east. These two peninsulas, as well as the other land not included in the Central Tract, are for the most part thickly wooded, mainly with coniferous species, and often down to the water's edge. They contain, here and there, short stretches of bog.

Specimens of all plants collected are preserved and deposited in the Eaton Herbarium of Yale University. The nomenclature used in the list is that of the seventh edition of Gray's Manual of Botany.

In the preparation of the list I am indebted to the following for their kind assistance: Professor M. L. Fernald, Professor N. L. Britton, Mr. W. H. Blanchard, and Dr. George N. Best. I desire to thank also Mr. E. L. Rand and Professor A. W. Evans for their valuable suggestions and criticism.

Since the region studied is so near to the island of Mt. Desert, about five miles distant, it has seemed to me that a comparison of the woody plants recorded for Mt. Desert in Rand and Redfield's Flora, with those in my list would be interesting. Of the 100 species and varieties collected in Brooklin, thirteen are not recorded in the Flora of Mt. Desert. They are as follows:

1. *Picea rubra* (DuRoi) Dietr. This species was not distinguished in the sixth edition of Gray's Manual, to which Rand and Redfield's Flora conforms, it being included under *Picea nigra* Link. Mr. Rand informs me that it is common on Mt. Desert Island.

2. *Salix nigra* Marsh. Only one tree of this was observed, near Brooklin Center, but this was apparently native.

3. *Salix alba* L. var. *vitellina* (L.) Koch.

4. *Populus alba* L. Several trees have sprung up at Brooklin Center, evidently descendants of much older trees which are planted out nearby.

5. *Populus candicans* Ait.

6. *Alnus mollis* Fernald. Included in the *Alnus viridis* (Chaix.) DC. of the Mt. Desert Flora, according to statement by Mr. Rand.

7. *Ribes nigrum* L.

8. *Sorbaria sorbifolia* (L.) A. Br. This plant was well established at Mount Ephraim Cemetery in North Brooklin, where presumably, it was originally planted. It is a native of Northern Asia.

9. *Amelanchier oligocarpa* (Michx.) Roem. Identified by Mr. W. H. Blanchard as probably this species.

10. *Rosa spinosissima* L.

11. *Prunus avium* L.

12. *Vaccinium pennsylvanicum* Lam. var. *nigrum* Wood. This variety was not distinguished in the sixth edition of Gray's Manual. Its presence, however, was indicated as a form of *Vaccinium pennsylvanicum* Lam. in the Mt. Desert Flora, and has since been definitely recorded in RHODORA.[1]

13. *Lonicera sempervirens* L.

It will be seen from the above that the additions to the woody plants recorded in the Mt. Desert Flora consist for the most part of naturalized species or of species which were not recognized in the sixth edition of Gray's Manual.

TAXACEAE.

TAXUS.

T. canadensis Marsh. AMERICAN YEW. Rare. Deep moist woods in Central Tract, and in a similar station in the woods between Brooklin Center and Herrick Bay.

PINACEAE.

PINUS.

P. Strobus L. WHITE PINE. Rather common, especially in northern portion of Central Tract.

P. resinosa Ait. RED PINE. Rare. Northwest part of Central Tract near road from Brooklin Center to Sedgwick. (*Owen L. Flye*).

P. rigida Mill. PITCH PINE. Rather rare, but locally abundant in northwest part of Central Tract. One station also at Flye Point. (*C. L. Parker.*)

---

[1] RHODORA **10**: 145. 1908.

LARIX.

L. laricina (Du Roi) Koch. American Larch. Tamarack. Common in swampy soil.

PICEA.

P. canadensis (Mill.) BSP. White or Cat Spruce. Common. This and the following species, together with the Balsam Fir, comprise the greater part of the coniferous forests of the township.

P. rubra (Du Roi) Dietr. Red Spruce. Common.

P. mariana (Mill.) BSP. Black Spruce. Common in bogs.

ABIES.

A. balsamea (L.) Mill. Balsam Fir. Common.

TSUGA.

T. canadensis (L.) Carr. Hemlock. Rare. One tree observed at Flye Point.

THUJA.

T. occidentalis L. Arbor Vitae. Common.

JUNIPERUS.

J. communis L. var. **depressa** Pursh. Low Juniper. Common. The form here is close to var. **montana** Ait.

J. horizontalis Moench. Rare. One station at Flye Point.

SALICACEAE.

SALIX.

S. nigra Marsh. Black Willow. Rare. Near Brooklin Center.

S. lucida Muhl. Shining Willow. Rare. Roadside, North Brooklin.

S. ALBA L. var. VITELLINA (L.) Koch. White Willow. Naturalized at Flye Point.

S. cordata Muhl. Heart-leaved Willow. Rare. West Brooklin.

S. discolor Muhl. Glaucous Willow. Common.

S. humilis Marsh. Prairie Willow. Rather common.

S. rostrata Richards. Common.

POPULUS.

P. alba L. White Poplar. Silver-leaved Poplar. Abele. Naturalized at Brooklin Center.

P. tremuloides Michx. American Aspen. Rather common.

P. grandidentata Michx. Large-toothed Aspen. Rather common.

P. balsamifera L. Balsam Poplar. Several trees planted in various parts of the township, and these have reproduced by seedlings.

P. candicans Ait. Balm of Gilead. Apparently introduced, but naturalized.

MYRICACEAE.

MYRICA.

M. Gale L. Sweet Gale. Common in wet places. Harriman Point; Central Tract.

M. carolinensis Mill. Bayberry. Common.

M. asplenifolia L. Sweet Fern. Common.

BETULACEAE.

BETULA.

B. populifolia Marsh. White or Gray Birch. Common.

B. alba L. var. **papyrifera** (Marsh.) Spach. Paper or White Birch. Common.

ALNUS.

A. mollis Fernald. Downy Green Alder. Common, especially near the coast. The *Alnus viridis* of the Mt. Desert Flora probably includes this species.

A. incana (L.) Moench. Speckled or Hoary Alder.

FAGACEAE.

FAGUS.

F. grandifolia Ehrh. Beech. Rare. Harriman Point.

QUERCUS.

Q. rubra L. Red Oak. Rare. Several trees at Harriman Point. One tree at Flye Point.

URTICACEAE.

ULMUS.

U. americana L. American Elm. Rare. Brooklin Center.

SAXIFRAGACEAE.

RIBES.

R. oxyacanthoides L. Smooth Gooseberry. Common.

R. nigrum L. Black Currant. Naturalized at old house site, Harriman Point.

R. prostratum L'Hér. Skunk Currant. Locally abundant in moist woods. Flye Point; Central Tract.

ROSACEAE.

SPIRAEA.

S. tomentosa L. Hardhack. Common.

S. latifolia Borkh. Meadow-sweet. Common.

SORBARIA.

S. sorbifolia (L.) A. Br. Mountain Ash Spiraea. Naturalized at Mount Ephraim cemetery, North Brooklin.

PYRUS.

P. Malus L. Apple. Common.

P. arbutifolia (L.) L. f. Red Chokeberry. Rather common.

P. melanocarpa (Michx.) Willd. Black Chokeberry. Rather common.

P. americana (Marsh.) DC. American Mountain Ash. Rather common.

AMELANCHIER.

A. canadensis (L.) Medic. Shad Bush. Service Berry. Common.

A. oligocarpa (Michx.) Roem. Rather common. Flye Point. Mr. W. H. Blanchard, to whom I have referred the specimens, states that it is probably this species.

CRATAEGUS.

C. macracantha Lodd. Hawthorn. Common.

POTENTILLA.

P. tridentata Ait. Three-toothed Cinquefoil. Locally abundant in the Central Tract.

RUBUS.

R. idaeus (L.) var. **aculeatissimus** (C. A. Mey.) Regel & Tiling. Wild Red Raspberry. Common in fields.

R. allegheniensis Porter. Mountain Blackberry. Common.

R. canadensis L. Common.

R. hispidus L. Running Swamp Blackberry. Common. Besides these species of Rubus one or two doubtful forms were collected.

ROSA.

R. spinosissima L. Scotch Rose. Naturalized at Flye Point and at Harriman Point.

R. cinnamomea L. Cinnamon Rose. Naturalized at Mount Ephraim Cemetery, North Brooklin.

R. rubiginosa L. Sweetbrier. Naturalized at Naskeag Point.

R. virginiana Mill. Glossy Rose. Common.

R. humilis Marsh. Low or Pasture Rose. Rather common. Flye Point; Harriman Point.

PRUNUS.

P. serotina Ehrh. Wild Black Cherry. Rare. One station at North Brooklin, where several trees were observed.

P. virginiana L. Choke Cherry. Rather common in thickets and along fences.

P. pennsylvanica L. f. Wild Red Cherry. Bird Cherry. Rather common.

P. Avium L. Sweet Cherry. Naturalized near roadside about one half mile north of Haven.

LEGUMINOSAE.

ROBINIA.

R. Pseudo-Acacia L. Common Locust. False Acacia. Established at Mount Ephraim Cemetery at North Brooklin, and on roadside in North Brooklin.

R. viscosa Vent. Clammy Locust. Established near roadside at Flye Point.

EMPETRACEAE.

EMPETRUM.

E. nigrum L. Black Crowberry. Rare. Rocky coast at Harriman Point.

COREMA.

C. Conradii Torr. Conrad's Crowberry. Broom Crowberry. Rare. Bog in Central Tract.

ANACARDIACEAE.

RHUS.

R. typhina L. Staghorn Sumach. Rather common. West Brooklin; Flye Point.

R. Toxicodendron L. Poison Ivy. Poison Oak. Rare. North Brooklin.

AQUIFOLIACEAE.

ILEX.

I. verticillata (L.) Gray. Black Alder. Winterberry. var. **tenuifolia** (Torr.) Wats. Common. Somewhat variable; some plants perhaps resembling more closely the type form.

NEMOPANTHUS.

N. mucronata (L.) Trel. MOUNTAIN HOLLY. Common in woods.

ACERACEAE.

ACER.

A. pennsylvanicum L. STRIPED MAPLE. MOOSEWOOD. Rather common.

A. spicatum Lam. MOUNTAIN MAPLE. Rather common.

A. saccharum Marsh. SUGAR OR ROCK MAPLE. Rare. A few trees seen in woods about one half mile north of Haven Post Office.

A. rubrum L. RED OR SWAMP MAPLE. Common.

VITACEAE.

PSEDERA.

P. quinquefolia (L.) Greene. VIRGINIA CREEPER. WOODBINE. Evidently introduced, but established at old house site, Harriman Point.

CORNACEAE.

CORNUS.

C. alternifolia L. f. ALTERNATE-LEAVED DOGWOOD. Rare. Southern shores of Herrick Bay.

ERICACEAE.

LEDUM.

L. groenlandicum Oeder. LABRADOR TEA. Rather common. Bog at Harriman Point; bogs in Central Tract.

RHODODENDRON.

R. canadense (L.) BSP. RHODORA. Common.

KALMIA.

K. angustifolia L. Sheep Laurel. Lambkill. Rather common in fields and bogs.

CHAMAEDAPHNE.

C. calyculata (L.) Moench. Leather Leaf. Common in bogs.

GAULTHERIA.

G. procumbens L. Teaberry. Checkerberry. Creeping Wintergreen. Locally abundant in woods near Brooklin Center, and in Central Tract.

CHIOGENES.

C. hispidula (L.) T. & G. Moxie Plum. Capillaire. Creeping Snowberry. Common in bogs.

GAYLUSSACIA.

G. baccata (Wang.) C. Koch. Black Huckleberry. Locally abundant. Harriman Point; northern part of Central Tract.

VACCINIUM.

V. pennsylvanicum Lam. Low Sweet Blueberry. Early Sweet Blueberry. Common.

V. pennsylvanicum Lam. var. **nigrum** Wood. Low Black Blueberry. A few plants at Flye Point.

V. canadense Kalm. Sour-top or Velvet-leaf Blueberry. Common.

V. corymbosum L. High or Swamp Blueberry. Rather rare. Swampy woods near north end of Herrick Bay; also in Central Tract.

V. Vitis-Idaea L. var. **minus** Lodd. Mountain or Rock Cranberry. Common.

V. Oxycoccos L. Small Cranberry. Rather rare. Bog at Harriman Point; Flye Point.

V. macrocarpon Ait. Large or American Cranberry. Common.

OLEACEAE.

FRAXINUS.

F. americana L. White Ash. Rather rare. Naskeag Point; Central Tract.

F. nigra Marsh. Black Ash. Rare. A few specimens observed in wet places in the Central Tract.

SYRINGA.

S. vulgaris L. Common Lilac. Naturalized at old house site, Harriman Point.

CAPRIFOLIACEAE.

DIERVILLA.

D. Lonicera Mill. Bush Honeysuckle. Locally abundant in various parts of the township.

LONICERA.

L. canadensis Marsh. American Fly Honeysuckle. Rare. Woods near Flye Point.

L. sempervirens L. Trumpet Honeysuckle. Evidently established near roadside, Flye point.

VIBURNUM.

V. alnifolium Marsh. Hobble-bush. Witch Hobble. Moosewood. Rather common. South shores of Herrick Bay; woods east of Brooklin Center, &c.

V. cassinoides L. Withe-rod. Wild Raisin. Common everywhere in thickets and borders of woods.

SAMBUCUS.

S. canadensis L. Common Elder. Rather rare. The following is the commoner species.

S. racemosa L. Red-berried Elder. Rather common.

Yale University.

NOTES FROM THE PHAENOGAMIC HERBARIUM OF THE NEW ENGLAND BOTANICAL CLUB,—I.

M. L. Fernald.

Under this general heading it is proposed to publish from time to time notes, suggested primarily by specimens in the Club Herbarium, which may be of interest to members of the Club and others who are working upon the flora of New England. As material accumulates and becomes organized in the Herbarium, many gaps in our knowledge of detailed distribution become obvious and, fortunately, many specimens drift in or become accessible which add very materially to our information about the ranges of the less generally distributed species. The present instalment of notes may appropriately bear the subtitle.

Some Local Plants of Eastern and Central Massachusetts.

Bromus purgans L., often confused with *B. ciliatus* and not ordinarily recognized in the flora of eastern Massachusetts, is represented in the Club Herbarium by specimens from several stations near Boston: Malden, July 13, 1879 (*H. A. Young*), July 24, 1879 (*E. & C. E. Faxon*); Maplewood, July, 1880 (*R. Frohock*); rocky woods north of Cascade, Middlesex Fells Reservation, Melrose, June 28, 1894 (*W. P. Rich*); Warren Farm, Brookline, July 21, 1897 (*J. R. Churchill*).

Bromus altissimus Pursh, another relative of *B. ciliatus* which is not generally recognized from the eastern half of Massachusetts, is represented in the Club Herbarium by specimens from Ayer, August 13, 1882 (*W. H. Manning*) and Princeton, August 9, 1894 (*J. F. Collins*).

Bromus Kalmii Gray has not been recorded, apparently, as far east as Worcester County, Massachusetts. There is an excellent specimen in the Club Herbarium collected at Sturbridge, July 23, 1899, by Dr. R. M. Harper.

Lolium temulentum L., as represented in the Club Herbarium, was collected on dumping grounds of Lowell, Charlestown, Boston, and South Boston from 1878 to 1884; and the awnless var. leptochaeton A. Br. in "Boston or vic[inity], 1882." Have they persisted?

Elymus virginicus L., var. submuticus Hook. There are three sheets of specimens of this very pronounced variety in the Club Herbarium, all collected in Revere by C. E. Perkins (August 13, 1880, and August 11, 1881). The plant is not known from elsewhere in New England and is possibly an introduction from the West, but the writer is inclined to class it with other species, more common from western New England westward, which are well known from Oak Island and other sections of Revere (see note under *Pedicularis lanceolat~~us~~*). a

Scirpus heterochaetus Chase is known in New England outside the Champlain Valley only in eastern Massachusetts. Mr. F. F. Forbes has a station of it on banks of the Charles River at Cow Bay, Dedham, and the writer has seen it at the margin of the Concord River near Carlisle Bridge in Bedford.

Scirpus fluviatilis (Torr.) Gray, another species not commonly seen east of the Connecticut River, was collected by Mr. W. H. Manning at Brighton (on the Charles River), June 30, 1879. Does it still occur there?

Rynchospora alba (L.) Vahl, var. macra Clarke, a very large extreme of the species, more abundant on the coastal plain from New Jersey to Florida, is known to the writer from two stations in eastern Massachusetts: Fresh Pond, Cambridge, August 20, 1853 (*Wm. Boott*) and the wetter portions of the bog, Round Pond, Tewksbury, September 18, 1909 (*M. L. Fernald & A. J. Eames*). The Tewksbury specimens are nearly 8 dm. high, and their principal inflorescences 2 cm. broad.

Carex aenea Fernald, not included in Mr. Joseph Jackson's recent (1909) Flora of Worcester County, was collected by Wm. Boott on Mt. Wachusett, June 27, 1878.

Carex trisperma Dewey, var. Billingsii Knight. If one may judge by the representation in the Club Herbarium, this recently recognized setaceous-leaved variety is about as common in northeastern Massachusetts as the typical broader-leaved form of the species; the latter being represented by eight specimens, the former by seven: from Lynnfield, Tewksbury, Littleton, Wakefield and Melrose, all north of Boston. But, since the variety extends from the sandy bogs of central Newfoundland to the pine barrens of New Jersey, it should be expected, also, in the cranberry bogs of southeastern Massachusetts, a region from which we have altogether too little herbarium material.

Carex crinita Lam., var. simulans Fernald. A sheet of specimens collected at Ashburnham, June 18, 1896, by Mr. Sydney Harris, represents an extreme southern station for this comparatively northern variety, which is otherwise unrepresented in the Herbarium from south of the White Mountains.

Carex aquatilis Wahlenb. Well developed fruiting tips from Georgetown, collected by the late Mrs. C. N. S. Horner, are the only specimens known to the writer from eastern Massachusetts. *C. aquatilis* is thus added to that list of very interesting species, characteristic of calcareous western New England but ordinarily unknown from eastern Massachusetts, which have long been known from isolated stations in Georgetown, Boxford, Lynnfield, and neighboring towns; a region of more numerous calcareous outcrops than other portions of eastern Massachusetts.[1] This localized flora includes such species as *Carex livida, Spiranthes lucida, Salix candida, Caulophyllum thalictroides, Parnassia caroliniana, Potentilla fruticosa, Ceanothus ovatus, Veronica Anagallis-aquatica, Senecio obovatus,* &c.

Carex torta Boott. Ashburnham, May 24, 1896 (*Sydney Harris*). Southbridge is the only station recorded in Jackson's Flora of Worcester County.

Carex virescens Muhl., var. Swanii Fernald, not included in Jackson's Flora of Worcester County, was collected on the east slope of Mt. Wachusett, alt. 1400 ft., July 15, 1893, by Professor J. F. Collins.

Carex aestivalis M. A. Curtis. It is not generally known, apparently, that this attractive species (like small-fruited *C. gracillima* with pubescent sheaths) was collected in eastern Massachusetts by William Boott. Beautiful material, labelled by Boott himself and properly named, is in the Gray Herbarium from Lexington, collected July 2, 1876. Is the station now "improved" away?

Carex Willdenowii Schkuhr is another species not generally known to botanists of eastern Massachusetts. It was included in Dame & Collins's Middlesex Flora from Melrose; and specimens labeled by William Boott, "Malden [Melrose], above the Waterfall, on the west side of a path, June 11, 1863," as well as earlier material from Boott, collected June, 1853, are in the Gray Herbarium. In the Club Herbarium is also a characteristic specimen from "dry woods, Ponkapog, Randolph, Mass., June 26, 1897" (*J. R. Churchill*).

---

[1] See Sears, Geological Map of Essex County (1905).

Carex plantaginea Lam. Ashburnham, April 26 and May 17, 1896 (*Sydney Harris*). Listed in Jackson's Flora of Worcester County only from Southbridge.

Carex digitalis Willd. Hillside north of Echo Lake, Princeton, July 17, 1893 (*J. F. Collins*). No definite station cited in Jackson's Flora of Worcester County.

Carex laxiflora Lam., var. leptonervia Fernald. This comparatively northern and montane variety is represented in the Club Herbarium by three sheets from the eastern and central portion of Massachusetts: Waverly, June 9, 1861 (*Wm. Boott*); Ashburnham, May 17, 1896 (*Sydney Harris*); damp shades, Southbridge, May 17, 1899 (*R. M. Harper*).

Carex hirta L., a European species, is represented in the Gray Herbarium by material collected in 1878 near Hammond Pond, Newton, by Messrs. E. & C. E. Faxon and by specimens from "Grove," Medford, July 16, 1884 (*Wm. Boott*); and in the Club Herbarium by a poor but recognizable specimen from Melrose, June 7, 1882 (*C. E. Perkins*). In Dame & Collins's Middlesex Flora other stations are cited, but the species does not seem to have been recently collected. Is it extinct?

Carex acutiformis Ehrh. is another Old World species which was once established in our flora, but which may now be extinct. It formerly grew in a swamp ("border of salt marsh" one label reads) at Savin Hill in Dorchester, and in 1886 was said by Professor L. H. Bailey to be "thoroughly established at Dorchester, Mass.; boggy meadow, New Bedford, Mass., *Willey*."[1] The New Bedford plant has apparently not been collected by recent botanists and the most recently collected specimens from Savin Hill seen by the writer are dated August 9, 1884. These stations should be sought.

Carex Pseudo-Cyperus L. Wet meadow, Southbridge, altitude 640 feet, June 14, 1899 (*R. M. Harper*). Listed in Jackson's Flora of Worcester County only from Fitchburg.

Carex intumescens Rudge, var. Fernaldii Bailey. Rich damp woods, Southbridge, altitude 645 feet, June 27, 1899 (*R. M. Harper*). Not included in Jackson's Flora of Worcester County.

Colchicum autumnale L. Early in October, 1909, this beautiful species was found in some abundance, by the writer and a party of his students, established in a meadow between Carlisle and Concord.

---

[1] L. H. Bailey, Proc. Am. Acad. xxii. 76 (1887).

POLYGONATUM LATIFOLIUM Desf. Several plants of this Eurasian species grow by the roadside in slight shade, near the Concord River in Concord, where they were first noticed by the writer May 24, 1909. Since this species with comparatively thick green-tipped perianths is commonly cultivated it is possible that the references, in the Report on the Flora of the Boston District (RHODORA x. 130) to *P. giganteum* as "escaped" and "introduced," belong rather to *P. latifolium.*

BERTEROA MUTABILIS (Vent.) DC., a large-fruited species but recently recognized in our flora, is in the Club Herbarium from a "roadside" in Dedham, August 22, 1897 (*E. F. Williams*). Similar material in the Gray Herbarium, collected by W. P. Rich, bears the data: "roadside, border of cultivated ground." Another Massachusetts specimen in the Gray Herbarium comes from Hingham, September, 1894 (*T. T. Bouvé*).

SISYMBRIUM OFFICINALE (L.) Scop. The typical plant, with pubescent pods, is in the Club Herbarium from a "dump, West Cambridge, Mass., July 10, 1909 (*C. A. Weatherby*).

POTENTILLA REPTANS L. has been a weed in the lawn in front of the Gray Herbarium in Cambridge for at least ten years. It was first noticed in June, 1900, and in spite of resodding and alterations of the lawn and terrace still holds its own.

GEUM URBANUM L. is abundantly established by roadsides and borders of fields in the neighborhood of the Botanic Garden in Cambridge. The earliest evidence of this colony is a specimen in the Gray Herbarium collected by Professor L. H. Bailey and labeled "Cambridge, Mass., Aug., 1884. Thoroughly established."

AGRIMONIA MOLLIS (T. & G.) Britton. It is apparently not generally known to botanists of eastern Massachusetts that *A. mollis* occurs at Winchester. It was first found by the writer on the wooded diorite talus of Horn Pond Mountain, October 14, 1906; and the station, where the plant occurs in some abundance with *Polygonum dumetorum* L., has since been regularly visited in September or October.

TRIFOLIUM MEDIUM L. is either a much more local plant than is ordinarily supposed or it is very rarely collected. As represented in the Club Herbarium and the Gray Herbarium, it seems to be confined to eastern Massachusetts: "Boston, perhaps introduced?" (old specimen without date); "In pascius et pratis siccis (ex Europa advenam) ad *Danvers*" (*Wm. Oakes*); shady pastures about Salem, July, 1863 (*J. L. Russell*); oak woods and rocky banks, North Salem, July 10, 1901 (*J. H. Sears*).

MELILOTUS INDICA (L.) All. should be watched for in waste lands. It is represented in the Club Herbarium or the Gray Herbarium by the following New England specimens, all from eastern Massachusetts: dump, Dracut, August 6, 1884 (*C. W. Swan*); Charlestown, July 4, 1879 and July 23, 1881 (*C. E. Perkins*); Charles River dumping grounds near Mt. Auburn, Cambridge, 22 August, 1897 (*B. L. Robinson*).

DESMODIUM CANESCENS (L.) DC. is so rare in Middlesex County as to be practically unknown to local botanists. It was collected by the late William Boott at at least two stations, as shown by his labels: "W. Cambridge, roadside opposite W. Niles's house," August 15, 1853, and August 24, 1854; and "roadside, Winchester, opposite Everett's," August 22, 1869. Are these stations still in existence?

LINUM FLORIDANUM (Planch.) Trel. is a plant which has but recently been known in New England. It was collected August 7, 1902, by Mrs. Clara Imogene Cheney in a bog at Centerville on Cape Cod and a beautiful sheet of Mrs. Cheney's material is preserved in the Club Herbarium.

MYRIOPHYLLUM ALTERNIFLORUM DC. Twenty years ago this boreal species was unknown from the continent of North America, but in 1891 Morong[1] recorded it from Lake Temiscouata (coll. *Northrop*) and Lake Memphremagog (coll. *Churchill*) in Quebec. Gradually our knowledge of its American distribution has increased until we now know it to be common from eastern Newfoundland to western Maine and to occur, perhaps locally, south to Massachusetts and west to Lake Superior.[2] The Massachusetts specimens, as representing the southern limit of the species, as far as known, are worthy special record; and it is also worthy of note that some of them were collected but unrecognized many years before the plant was recorded as a native of North America. The Massachusetts specimens thus far known are: Mystic Pond, August 26, 1853, and August 6, 1865 (*Wm. Boott*); Westford, September 2, 1902 (*Miss E. F. Fletcher*); Sprague's Pond, Readville (*C. E. Faxon*). The material from Sprague's Pond was mixed with *M. ambiguum*, forma *capillaceum*, a comparatively southern plant, so that it is not unreasonable to expect that *M. alterniflorum* may yet be found south of its present known limit.

---

[1] Morong, Bull. Torr. Bot. Cl. xviii. 242 (1891).

[2] Collected on Isle Royale, Michigan, August 6, 1909, by W. S. Cooper.

STACHYS AMBIGUA (Gray) Britton, recently reported by Professor Wiegand (RHODORA, xi. 83) for the first time in New England, proves to have been collected several times in eastern Massachusetts. The Club Herbarium contains the following specimens: Lowell, near the Concord River, July 14, 1880 (*C. W. Swan*); in gravelly soil back from Newton Waterworks Basin, Needham, July 18, 1902 (*H. A. Purdie*); meadows, Charles River, Needham, August 26, 1905 (*J. R. Churchill*); boggy meadows, Sharon, July 12, 1896 (*W. P. Rich, E. F. Williams*). These stations and those already cited by Professor Wiegand indicate that the plant is somewhat generally distributed in the valleys of the Concord, Charles, and Neponset Rivers.

LYCOPUS EUROPAEUS L. This coarse species has grown in waste land and neglected yards about the "Tin Cañon" in Cambridge for at least sixteen years. The earliest collection was made by Professor B. L. Robinson in October, 1894.

HYOSCYAMUS NIGER L. The Henbane, which was recorded from New England by Josselyn in 1672;[1] in the days of Manasseh Cutler (1785) was "common amongst rubbish, and by road sides";[2] by Jacob Bigelow, in 1814, was included in the Florula Bostoniensis from "waste grounds"[3] and in 1840 from "roadsides, &c.,"[4] is now one of our rarest plants and it is not improbable that it has entirely disappeared from our Massachusetts flora. In the Gray Herbarium there are no specimens from south of Maine, where it is very local and has a bare foot-hold, but in the Club Herbarium are two specimens: Boston, July 15, 1880 (*C. E. Perkins*); Somerville, September 25, 1886 (*F. S. Collins*). In the Flora of Essex County, Mr. John Robinson cites two old stations only besides an indefinite "Essex County" of William Oakes and makes the comment that "*Hyoscyamus niger* and *Artemisia Absinthium* (Wormwood), spoken of by Dr. Cutler and other earlier writers as common in waste places, are now very rare or unknown."[5] That *Hyoscyamus* should have passed so completely from our flora, when a century and a quarter ago it was an established weed, is of peculiar interest, for throughout the longer-settled regions of calcareous sections of Quebec, from the city of Quebec to the base of the Gaspé Peninsula, it has maintained its weed-character and its slimy foliage and lurid flowers are familiar to nearly everyone who takes special note of the vegetation.

---

[1] Josselyn, N. E. Rarities, 86 (1672); Tuckerman reprint, 114.

[2] M. Cutler, Mem. Am. Acad. i. 419 (1785).

[3] Bigelow, Fl. Bost. 52 (1814).

[4] Bigelow, Fl. Bost. ed. 3, 84 (1840).

[5] J. Robinson, Fl. Essex Co. 15 (1880).

PEDICULARIS LANCEOLATA Michx. is not generally recognized from east of the Connecticut. In the Club Herbarium, however, is a sheet of *P. lanceolata*, originally in the collection of the Middlesex Institute, labeled: "Revere just over the line [from Middlesex County]. *Moody*." As far as the writer is informed no one else has recently seen this plant in eastern Massachusetts and it is feared that its tall stature and rather showy flowers long ago led to its extinction. The plant is worthy special note not only as a rare species which is now probably extinct but as another member of the peculiarly rich and isolated flora (typical from western New England westward) for which the town of Revere (including Oak Island)[1] has been famous since the days of Jacob Bigelow, a flora including several species unknown or almost unknown elsewhere in eastern Massachusetts: *Elymus virginicus*, var. *submuticus* (see above), *Amphicarpa Pitcheri, Sanicula gregaria, Agastache scrophulariaefolia, Collinsonia canadensis, Scrophularia marilandica, Aster salicifolius*, &c.

CAMPANULA ULIGINOSA Rydberg. Many local botanists have expressed surprise that this species as well as *C. aparinoides* Pursh, is found in our territory. It is in the Club Herbarium from Rock Pond, Georgetown and from South Georgetown (*Mrs. Horner*) and in the Gray Herbarium from Concord (*J. M. Greenman*), Fresh Pond, Cambridge (*Wm. Boott*), and Sharon (*S. F. Poole*).

HELIANTHUS MAXIMILIANI Schrad., recently reported from scattered eastern stations, was found by Mr. F. S. Collins in a "rather sandy field" by Wright's Pond, Middlesex Fells, August 29, 1909.

GALINSOGA CARACASANA (DC.) Sch. Bip. appeared as a weed in the Botanic Garden, Cambridge, in 1909, and is thriving this year, the coarse sprawling stems often measuring more than 1 m. in length.

GRAY HERBARIUM.

---

[1] See H. A. Young, Bull. Essex Inst. xiv. 141–157 (1882); Reprint 1–19 (1883). W. P. Rich, RHODORA, iv. 87–94 (1902).

Vol. 12, no. 140, including pages 157 to 172, was issued 15 August, 1910.

A TEXTBOOK OF BOTANY

FOR COLLEGES AND UNIVERSITIES

By JOHN MERLE COULTER, CHARLES REID BARNES, and HENRY CHANDLER COWLES, Members of the Botanical Staff of the University of Chicago

(Vol. I.) Morphology and Physiology. Price, $2.00.
(Vol. II.) Ecology. Price, $2.00
(*Ready in November*)

THESE volumes contain selected material, general statements which are not confused by exceptions, and a minimum of terminology. In the part on Morphology, the evolution of the plant kingdom has determined the selection of material and of structures. Physiology is presented in its modern aspect, the explanation of plant behavior being in terms of chemistry and physics, so far as present knowledge permits. The comparatively new subject of Ecology is organized for the first time as a college text. The work is strictly modern in its point of view. All antiquated conceptions have been carefully discarded. The logical presentation, the orderly arrangement, the subordination of details to principles, the omission of sterile facts, and the excellent original illustrations are other important features.

AMERICAN BOOK COMPANY
NEW YORK CINCINNATI CHICAGO BOSTON

HOME GROWN LILIES.

Fresh from Beds. Wild Flowers, Hardy plants of all kinds.
Send for catalogue.

F. H. HORSFORD, Charlotte, Vt.

BIRDS OF MAINE

is the latest and most complete work on northeastern bird life. It is an illustrated work of 693 pages and contains descriptions of the plumage and full accounts of the nests, eggs, habits and general home life of 327 species of birds. As a book for the amateur or for the scientific student of bird life in northeastern America it is unexcelled. Sent prepaid on receipt of price, $3.50. Address all orders to

ORA WILLIS KNIGHT, 84 Forest Avenue, Bangor, Maine.

CAMBRIDGE BOTANICAL SUPPLY COMPANY,
WAVERLEY, MASS.
BOTANICAL SUPPLIES OF EVERY DESCRIPTION.
Samples of Driers and Mounting Papers sent on request.
ASK FOR NEW CATALOG, NO. 91.
STANDARD MATERIAL. IMMEDIATE SHIPMENT.
Physiological Instruments. How do Plants Work?